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polyolefins must differ by at least 5° C, and wherein the polymerization is carried out at a temperature of from -60 to 200°C, and a pressure of from 0.5 to 100 bar, in solution, in suspension or in the gas phase, in the presence of a catalyst, wherein the catalyst comprises

(A) at least two racemic or s-symmetric metallocenes as transition-metal components and an aluminoxane of the formula Π

and/or of the formula III

$$\frac{\left(\begin{array}{c} R \\ A \end{array}\right)}{\left(\begin{array}{c} A \end{array}\right)} n' + 2} \tag{III}$$

where in the formulae II and III, the radicals R may be identical or different are a C_1 - C_6 -alkyl group, a C_1 - C_6 -fluoroalkyl group, a C_6 - C_{18} -aryl group, a C_6 - C_{18} -fluoroaryl group or hydrogen, and n' is an integer from 0 to 50, and the aluminoxane component may additionally contain a compound of the formula AlR₃, or

(B) at least two racemic or s-symmetric metallocenes as transition-metal components and a salt-like compound of the formula R_xNH_{4-x} or of the formula $R_3PHBR'_4$ wherein x is 1, 2 or 3, R is identical or different and is alkyl or aryl, and R' is aryl, which may also be fluorinated or partly fluorinated,

where the transition-metal component used comprises at least two metallocenes of the formula I:

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in which

M1 is Zr or Hf,

R¹ and R² are identical or different and are a hydrogen atom, a C₁-C₁₀- alkyl group, a C₁-C₁₀-alkoxy group, a C₆-C₁₀-aryl group, a C₆-C₁₀-aryloxy group, a C₂-C₁₀-alkenyl group, a C₇-C₄₀-arylalkyl group, a C₇-C₄₀-alkylaryl group, a C₈-C₄₀-arylalkenyl group, or a halogen atom,

R³ and R⁴ are identical or different and are indenyl, cyclopentadienyl or fluorenyl which are optionally substituted with substituents as defined for R¹¹ and R¹² and where the substituents are identical or different or form together with the atoms connecting them a ring,

R5 is

$$\mathbb{R}^{11}$$

$$\downarrow$$
- \mathbb{M}^2 - or
$$\downarrow$$
 \mathbb{R}^{12}

where R^{11} and R^{12} are identical or different and are a hydrogen atom, a halogen atom, a C_1 - C_{10} -alkyl group, a C_1 - C_{10} -fluoroalkyl group, a C_6 - C_{10} -aryl group, a C_6 - C_{10} -fluoraryl group, a C_1 - C_{10} -alkoxy group, a C_2 - C_{10} -alkenyl group, a C_7 - C_{40} -arylalkyl group, a C_8 - C_{40} -arylalkenyl group or a C_7 - C_{40} -alkylaryl group, or R^{11} and R^{12} together with the atoms connecting them, form a ring,

M2 is silicon or germanium,

 R^8 and R^9 are identical or different and are as defined for R^{11} and

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m and n are identical or different and are zero or 1 and wherein for at least one of the at least two metallocenes R³ is a substituted indenyl or an optionally substituted fluorenyl.

22. The process as claimed in claim 17, wherein said two different metallocenes are rac-dimethylsilyl(2-methyl-1-indenyl)₂ZrCl₂ and rac-dimethylsilyl(indenyl)₂HfCl₂.

Please see Appendix I for the changes made to the claims. The terms underlined have been added to the claim and the terms bracketed have been deleted from the claims.

REMARKS

The applicants respectfully request reconsideration in view of the amendment and the following remarks. The applicants have amended the claims as suggested by the Examiner in order to overcome the 35 U.S.C. §112 rejections. The applicants have also amended claim 22 so that it is not dependent on cancelled claim 20.

Claims 15, 17-19, 21-25 and 27-32 were rejected under 35 U.S.C. §112, first paragraph.

Claims 15, 17-19, 21-25 and 27-32 were rejected under 35 U.S.C. §112, second paragraph.

Claim 32 was rejected under 35 U.S.C. §112, fourth paragraph. Claims 15, 17-19, 21-25 and 27-31 were rejected under the judicially created Doctrine of Obviousness-Type Double Patenting as being unpatentable over claims of U.S. Patent No. 5,700,866, hereinafter referred to as "Winter '866". To the extent that these amendments do not overcome the rejections, the applicants respectfully traverse these rejections.

Rejection of Claims 15, 17-19, 21-25 and 27-31

Claims 15, 17-19, 21-25 and 27-32 were rejected under 35 U.S.C. §112, first and second paragraphs. The claims were objected to as containing new matter.